

What is claimed is:

1. An exposure controller of a digital camera using an image pick-up device on which an image of an object to be photographed is captured, said exposure controller

5 comprising:

a photometering sensor; and

a control device; wherein

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said control device calculates a first exposure time in accordance with a photometering value obtained via said  
10 photometering sensor;

said control device performs a pre-exposure in which a sensitive surface of said image pick-up device is exposed at a second exposure time shorter than said first exposure time; and

15 said control device performs a main exposure in which said sensitive surface of said image pick-up device is exposed at a third exposure time obtained by changing the value of one of said first exposure time and said second exposure time in accordance with a picture signal output  
20 from said image pick-up device, said picture signal being output when said image pick-up device is exposed at said second exposure time by said pre-exposure.

2. The exposure controller of a digital camera according to claim 1, wherein said digital camera is an SLR  
25 digital camera.

3. An exposure controller of a digital camera,  
comprising:

a photometering sensor; and

a control device; wherein

5       said control device performs an exposure operation  
to calculate a first exposure time in accordance with a  
photometering value obtained via said photometering  
sensor;

10       said control device calculates a second exposure time  
shorter than said first exposure time in the case where said  
first exposure time is longer than a reference time  
duration;

15       said control device performs a pre-exposure in which  
a sensitive surface of an image pick-up device of said  
digital camera is exposed at said second exposure time to  
calculate a brightness value in accordance with a picture  
signal which is output from said image pick-up device at  
said pre-exposure; and

20       said control device calculates a third exposure time  
which is to be used at a main exposure, in which said  
sensitive surface of said image pick-up device is exposed  
to obtain a picture signal which is to be stored in a memory,  
by changing the value of one of said first exposure time  
and said second exposure time in accordance with said  
25   calculated brightness value.

4. The exposure controller of a digital camera according to claim 3, wherein said reference time duration is a predetermined flash synchronization speed.

5. The exposure controller of a digital camera according to claim 3, wherein said second exposure time is equal to said first exposure time divided by the Nth power of two ( $2^N$ ).

6. The exposure controller of a digital camera according to claim 4, wherein said control device calculates said third exposure time in accordance with an average brightness value of all the pixels of said image pick-up device which are obtained by said pre-exposure.

7. The exposure controller of a digital camera according to claim 6, wherein said third exposure time is calculated by multiplying said second exposure time by an exposure compensation factor;

wherein said exposure compensation factor is calculated by dividing a predetermined value by said average brightness value, and multiplying the result thereof by the Nth power of two ( $2^N$ ).

8. The exposure controller of a digital camera according to claim 3, wherein said reference time duration is a longest exposure time which can just prevent an image formed on said sensitive surface of said image pick-up device from becoming blurry, caused by hand movement.

9. The exposure controller of a digital camera according to claim 3, wherein said digital camera is an SLR digital camera.

10. An SLR digital camera comprising:

5 a photometering sensor for measuring a object brightness;

a CCD image sensor;

a focal plane shutter positioned in front of said CCD image sensor;

10 a control device; wherein

said control device calculates a first exposure time in accordance with a photometering value obtained by said photometering sensor;

said control device drives said focal plane shutter  
15 at a second exposure time shorter than said first exposure time; and

said control device subsequently drives said focal plane shutter at a third exposure time obtained by changing the value of one of said first exposure time and said second exposure time in accordance with a picture signal output  
20 from said CCD image sensor, said picture signal being output when said CCD image sensor is exposed at said second exposure time via said control device.